

Montana's Early Learning Guidelines

Fun Family Activities

For Preschool Children & their Families

• A Companion Piece •



What Are They?

Montana's Early Learning Guidelines reflect what children ages three to five need to know, understand, and be able to do by the time they reach kindergarten.

Important: Do not leave children unattended while doing the activities in this book. Adult supervision is essential!

Parents and other family members play an important role in supporting their child's growth and development. Development occurs at a unique pace for each child. The purpose of this document is to help you with ways to support your child's learning through fun and interactive activities. Most of the activities are designed to fit into your family's day-to-day routines.

As a family, you can use this information to:

- Help you understand how your child is growing and learning.
- Help you plan special activities for your child that can assist in growth and learning.
- Think about your typical day and how you can use your family routines to support your child's growth and development.

Your child learns all kinds of things from you. You are his or her first and most important teacher. Your home is a learning place. By making the most of this very special setting, you can teach your child skills that will help him or her do well in school and beyond. Children learn best through play. Play with your child using common household items and your child will learn new skills and develop a love of learning.

Your home environment is important.

“The environment provided by the child’s first caregivers has profound effects on virtually every facet of early development.”

(From *Neurons to Neighborhoods: The Science of Early Childhood Development*, Institute of Medicine, 2000)

The Early Learning Guidelines Fun Family Activity book includes activities that support all of the learning domains listed below. We have included parenting tips and other ideas we know will be helpful. Have fun with your child’s learning and enjoy your time together.

Creative Arts - Through creative arts children explore and represent their ideas about the world, reveal their inner thoughts and feelings, find ways to understand themselves, enrich their world and bring beauty into it.

Language & Literacy - Language and literacy are an integral part of development for young children, and happen in a sequential manner. A strong foundation in the development of language proficiency is the key to developing literacy skills, thus a pre-requisite in learning to read. Young children need an environment filled with rich language and many opportunities to hear language and use language for a variety of purposes.

Mathematics & Numeracy - The foundation for children’s mathematical development is established in the earliest years. Early mathematics learning builds on the curiosity and enthusiasm of children and grows naturally from their experiences. Appropriate mathematical experiences challenge young children to explore ideas, make sense of the world around them and find meaning in the physical world.

Physical Development & Health - Health safety, and physical development are critical to the skills, timing and expression of early learning. A safe and healthy environment provide an essential foundation for children's personal health and well-being.

Science - Young children are natural scientists. Beginning with the need to understand their immediate environment, they move from awareness to exploration, inquiry, and utilization of knowledge.

Social & Emotional Development - Each child's feelings and social behaviors will be unique. The general characteristics of age and developmental levels must guide adult expectations and their interactions with children. This is the fundamental basis of all early learning.

Social Studies - As children grow and develop, they become increasingly aware of their physical environment. They begin to identify similarities and differences between people and discover that no two places or objects are the same. A child's natural curiosity about the world can be nurtured in a caring and learning environment that provides opportunities for exploration of other communities, regions and culture.

Helpful Resources - Emergency and disaster preparedness, child care and preschool checklists, recipes and books to share with your child.

Creating A Learning Environment

Novelty: Give your child chances to experiment with new objects and environments. Novel experiences not only feed your child's natural curiosity, but they also spur the growth of new connections in the brain. Exposure to interesting toys and games stimulates your child's brain, and as it processes new information, it's wiring develops.

Playtime (Play's the Way!): Safe supervised play in an unstructured environment is beneficial to your child's development. Children learn best through play.

This does not mean that supervised play groups are not valuable. Watching and playing with others – parents, siblings, and peers – floods your young child's mind with new ideas. In social settings like play groups, play-grounds, child care programs or even library reading hours, they'll learn to use objects in new ways and to interact in socially acceptable ways.

Avoid Overstimulation: When it comes to learning and brain development, be aware of too much of a good thing. Avoid overstimulation. Pay attention to your child's cues.

Screen Time: Don't rush to turn on the computer. Experts suggest waiting until your child is at least three years old before introducing him to the computer, because children younger than three lack the motor skills or attention span to absorb the benefits of computer learning. Research does not indicate that computer activities give young children a head start in school or are more beneficial than spontaneous play or interaction with others. Instead, young children need to play and explore in three dimensions, not in the two-dimensional world of a computer or television screen.

“Contrary to the broader culture, most of what children need, money cannot buy. Children need time and space, attention, affection, guidance and conversation. They need sheltered places where they can be safe as they learn what they need to know to survive.”

Mary Pipher, Ph.D.

6 Ways to Encourage Children's Success

1. Be a good role model. Children learn as much from how you act as they do from what you say.
2. Treat children with respect, and they will take your words and example to heart.
3. Celebrate every child's success and sincere efforts. Be generous with your words of praise.
4. Have patience. Accept that children make mistakes, are inconsistent, and act thoughtlessly – this is part of being a child.
5. Share your enthusiasm for the value of education and the fun of learning.
6. Set high but realistic expectations for children's work and behavior.

Creative Arts

Through creative arts children explore and represent their ideas about the world, reveal their inner thoughts and feelings, find ways to understand themselves, enrich their world and bring beauty into it.

- **Art Appreciation**
- **Art Elements**
- **Music Production**
- **Drama Appreciation**
- **Art Production**
- **Music Appreciation**
- **Music Elements**
- **Drama Elements**

“The creative arts are our universal language, the language of our imagination, of musicians, and dancers, painters and sculptors, storytellers and poets.”

- Edwards, 1997



Art Appreciation

Children express personal interests, ideas, and feelings through art and begin to share opinions about artwork and artistic experiences.

- Let your child try painting with materials not normally used for painting.
- Try things like toothbrushes, feathers, and various small kitchen utensils.
- Make a mitten using bubble wrap and duct tape for your child to “pat paint” with.
- Try painting both indoors and outdoors if weather permits.

Children 3 to 4 years of age can now focus for longer periods of time on activities like cutting and drawing and creating interesting projects. They will use language to make up stories and rhymes and songs, and they love to play with words and ask lots of questions. Encourage your child to tell you about their artwork and avoid asking questions such as, “What is it a picture of?”

TIP

Cut the bottom off a plastic grocery bag and fit over your child like a tank top to use as a paint smock.

Always watch children closely when using plastic bags.





Art Production

Children use symbols, elements such as shape, line, color, and texture, and principles such as repetition in art experiences.

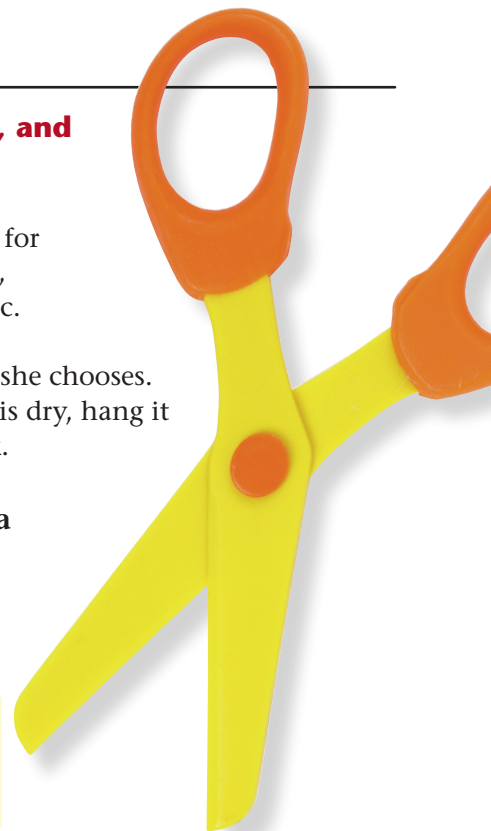
Provide a rich assortment of materials and experiences. A box of scraps is wonderful for building collage projects. It might include ribbon, cellophane, styrofoam trays, yarn, cotton balls, etc. Add standard materials such as scissors, markers, tape, glue, clay, etc.

Provide a piece of cardboard for your child to glue the materials on in any way he or she chooses. Cutting the sides off of a cereal box works well for the cardboard. When the collage is dry, hang it at your child's level so that both you and your child are able to admire their artwork.

- Putting small amounts of glue in a small shallow container and using a paintbrush for the glue is easier for a child to control than trying to manage the flow of glue from a bottle.
- Children will enjoy collecting collage items such as leaves outdoors.

TIP

For preschool children, the process is more important than the finished product!

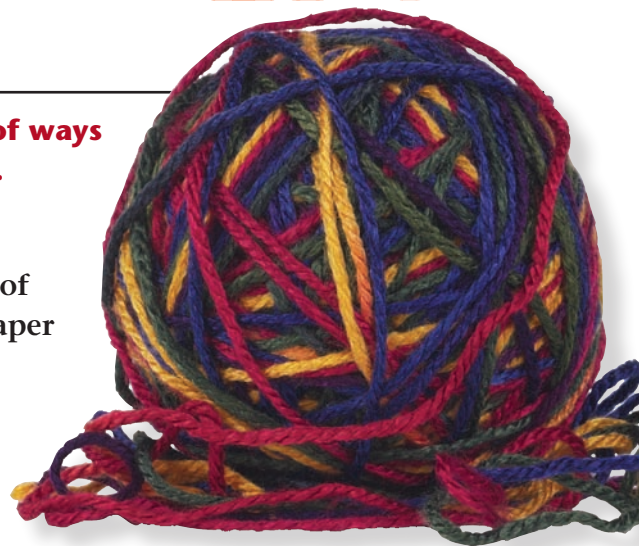


Art Elements

Children use different art media and materials in a variety of ways for creative expression, exploration and sensory experience.

- Follow your child's lead.
- Be willing to change gears if your child decides to paste bits of colored paper onto a sheet of paper instead of making the paper chain you had planned on.
- Try to share his or her interest in the process rather than focusing on a product.

Have masking tape, pipe cleaners, and lightweight wire available for joining the items to form a sculpture. Show the materials to your child and allow them time to explore them. Explain what a sculpture is and show them how they can use the tape, wire, etc. to join items together to form a sculpture. Talk to your child about the different weights, textures, and colors of the items. The sculpture can be joined to a piece of firm cardboard or shallow box if you wish.



TIP

Beautiful Junk: Gather a variety of household castoffs. (Cardboard tubes, yarn and fabric scraps, egg cartons, buttons, wood scraps, newspapers, magazines, etc).



Music Appreciation

Children show enjoyment of music through facial expressions, vocalization, and various movements.

Dance, Dance, Dance

Choose music on tapes, CDs, or the radio that your child will enjoy moving to. Be sure to have music that will bring out different kinds of movement – fast and slow, music with a hard beat, music with a soft beat, and others.

- Tell your child to move the way the music tells them. Then play one piece for a minute or two as your child dances. Show the children how much you enjoy the ways they dance. Talk about the music if your child just wants to listen. Dance with your child.
- Make sure there is plenty of space for dancing.
- Ask your child how they feel when listening to the music; happy, sad, scared, etc.

TIP

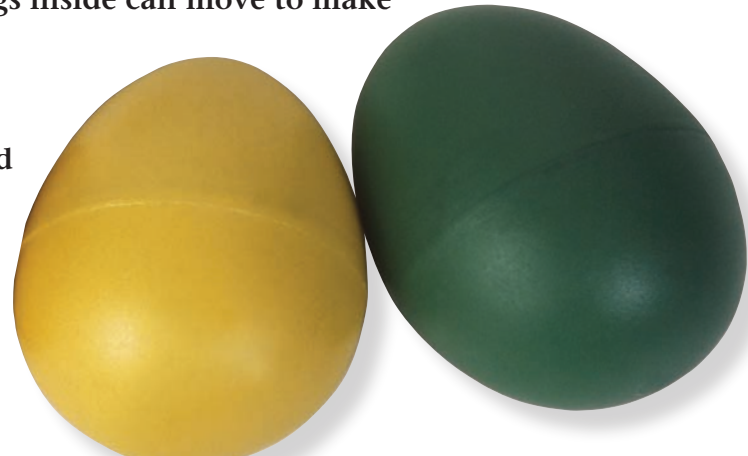
Turn off music when the activity is over. Young children will listen better to music if it is not a part of the general background noise.

Music Production

Children produce vocal/instrumental music and rhythmic movements spontaneously and in imitation.

Shakers:

- Collect plastic jars with lids, plastic Easter eggs, and other plastic containers for your child to fill to make their own shakers.
- Put out different things your child can put into his or her containers such as rice, dried beans, sand, or pebbles. Let your child fill several containers with different items. Remind your child to leave lots of space so the things inside can move to make noise. Secure all lids with strong tape.
- Use the cans when singing with your child or when listening to music. Help your child talk about how they made their shakers, what they put in them, and how they sound.



Music Elements

Children begin to differentiate variations in tempo, dynamics, and types of sounds made by different classes of instruments (percussion, wind, string).

Matching Sounds:

- Cover empty juice cans or plastic jars with colored paper, (*contact paper works well*), so that they all look the same.
- Fill two sets of cans with things that make sounds, such as rice, sand, bells, beads, or pebbles.
- Tape lids on securely with strong tape.
- Let your child shake all the cans and listen. Then pick up one can. Shake it. Give the child two other cans to shake. Make sure that one of them matches the can you are shaking. See if your child can find the one whose sound matches yours.

TIP

Begin with cans that make very different sounds. See if two children will play this game without you, once they know how.





Drama Appreciation

Children show appreciation and awareness of drama through observation and imitation, and by participating in simple dramatic plots, assuming roles related to their life experiences. Young children enjoy telling stories through action, dialogue or both.

Dress-Up:

- Collect easy to put on men's and women's clothes for your child to use in dress-up play.
- Include hats, shoes, dresses, skirts, jackets, pants, and purses.
- Shorten clothes to make them safe. Let children put on these "big people's" clothes and pretend in their own way. Be sure to keep the clothes clean, especially if more than one child uses the dress-ups.
- Let your child see themselves in a large mirror if available.

TIP

Don't put out too many clothes at once. Add new interest to the dress-ups by changing the clothes you put out. Add props such as hats or vests as your child shows interest in a person portrayed in a book or something they observed recently.

Drama Production

Children create and direct complex scenarios based on individual and group experiences. Children create situations, arrange environments to bring their drama to life, assume roles, direct others and accept direction from others.

Take a Trip:

- Read or tell a story about taking a trip by car, bus, airplane, or train. Ask your child if they have ever taken a trip, and ask him or her to talk about it. Suggest that you can help your child make a play car, bus, train, etc.
- Use small chairs or cardboard boxes for seats.
- Add a steering wheel using a round plastic lid, paper plate, or cut a round cardboard shape.
- Tell your child they can pack for the trip using dress-up clothes, purses, and tote bags.
- Take turns with your child being a passenger and the driver.





Drama Elements

Children role-play story books, poems and simple imaginary themes using elements of drama including character, place, theme, or idea.

Act Out a Favorite Story:

- Read or tell your child a very familiar story that your child will be able to act out.
- Figure out the different parts children could play. You and your child, siblings, friend or other family members can act out different parts of the story with your child. Let your child or children choose the part they want.
- Tell the story as the child, children, and/or adults act.
- Give some direction, but not too much. Most of all, have fun!

TIP

There are many versions of stories such as the *Three Little Pigs* and the *Three Billy Goats Gruff* that are universal favorites.

Language & Literacy

- **Receptive Language**
- **Expressive Language**
- **Phonological Awareness**
- **Print Awareness**
- **Print Development**

“Every child is born a genius.”

R. Buckminster Fuller (1895 - 1983)
American Architect, Engineer



Receptive Language

Children enter into the exchange of information around what is seen, heard, and experienced. They begin to acquire the concepts and language that contribute to learning to communicate and eventually, to read.

Songs with Action Words:

Sing a song about actions to the tune of “*This Is The Way We Wash Our Hands.*” Put in a lot of different action words that your child can try to copy. See if your child can do the actions when they hear the words you sing. If they don’t know what the word means, do the action so they can copy what you do.

*This is the way we jump up and down. Jump up and down, jump up and down.
This is the way we jump up and down so early in the morning.*

TIP

Try other actions such as hop on two feet, reach to the sky, and stand on one foot. Add props, such as scarves and shakers.

Read books with action words and encourage your child to participate in the storytelling by doing the actions they see and hear as you read together. There are several children’s book suggestions with this document that would be good choices.



Expressive Language

Children learn when they talk out loud. Children use words to help adults and others to understand their needs, ask questions, express feelings and solve problems.

Vocabulary Notebook:

- Cut pictures from magazines or catalogs of animals, cars, furniture, anything that interests your child. Stick with one theme at a time.
- With your child, glue the pictures into a notebook. Ask your child what the picture is of and then write the name under the picture.
- Use the book frequently with your child having him or her “read” the labels under the pictures to you.
- Expand upon the pictures as your child becomes familiar with the labels. Ask your child questions about the pictures such as, “Is the dog under the table?” or, “Is the red ball bigger than the blue ball?”





Phonological Awareness

Children become aware of the sounds of letters and combinations of letters that make up words. They begin to manipulate syllables and sounds of speech.

My Name Match:

- Write your child's name on a sheet of paper or cardboard. Talk about the first letter of your child's name and the sound that letter makes.
- For example; write Molly on the cardboard and point that her name starts with an M and that M makes an “mmmmm” sound.
- Ask your child to find things in your home that start with M or the “mmmmm” sound to match her name.
- Do the same activity while walking or driving with your child. Find things in your neighborhood that start with the first letter of your child's name.

The word 'Molly' is written in a large, blue, cursive script. The letters are thick and fluid, with a slight shadow effect behind them, giving it a three-dimensional appearance. It is positioned on the right side of the page, partially overlapping the list of instructions.

TIP

The first letters a child will learn are those that are most important to him or her: the first letter of her name, the first letter of a favorite store, restaurant, or product, the first letter of the names of people important to her.



Print Awareness

**Children acquire an understanding that print carries a message through symbols and words.
Children learn to make the connection between sounds and letters (the alphabetic principle).**

Write a Story/Make a Book:

Take a “reading walk” in your home with your child. Walk around your home looking for places where print is used, (books, magazines, grocery lists, instructions, labels, etc.). As your child points out print examples, write them down on paper to make a list. After the walk, sit down with your child and write the book title *We Went Walking* on a file folder to make a cover for the book.

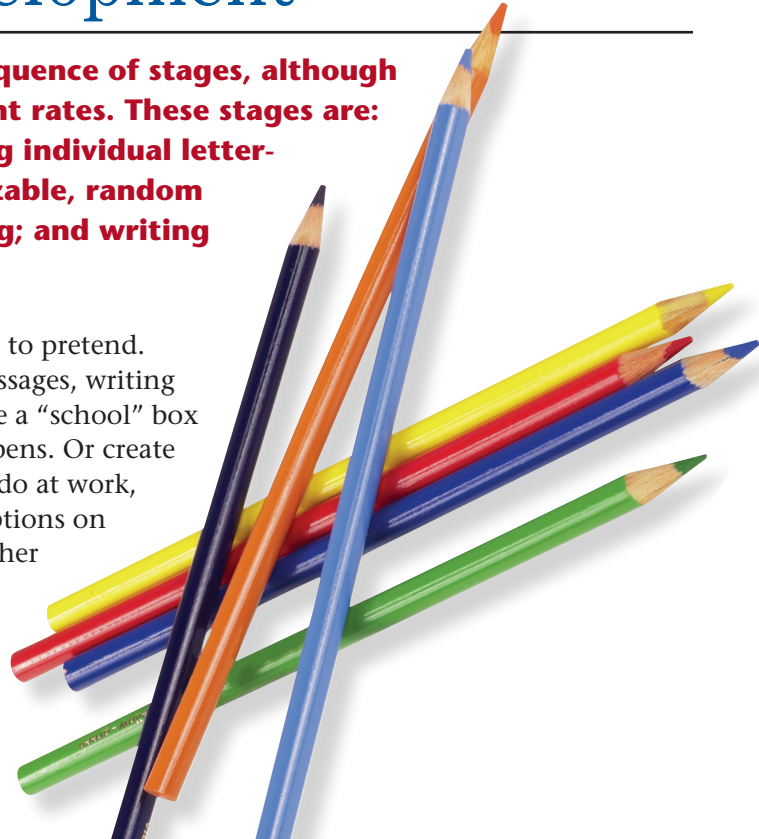
- Write the first print example on your list on a piece of paper; ask your child to “write” the same words under what you have written and let them scribble what they see. Their scribbles may not look like letters, which is alright. This will be the first page of your book. Your child may want to illustrate each page with a picture. Continue making your book pages in this same manner.
- Attach all the pages together inside the file folder using a stapler, tape, or lacing with yarn.
- Read the book aloud with your child and see if your child can follow the path you followed to make the book, pointing out the print examples in the book. Take turns reading the book and following the path.

Read your book together often. Point out print examples daily and let your child see you read for pleasure and for information.

Print Development

Children acquire the ability to write through a sequence of stages, although individual children will become writers at different rates. These stages are: writing using scribble-like markings; writing using individual letter-like marks or mock letters; writing using recognizable, random letter strings; writing using semi-phonetic spelling; and writing using phonetic spelling.

Create an area or box of materials that encourage your child to pretend. Include materials for writing grocery lists and telephone messages, writing calendars, and writing in old checkbooks. You might include a “school” box with a small chalkboard, lined paper, pencils, and marking pens. Or create a “work” box where your child can pretend to do what you do at work, whether it is taking orders in a restaurant or writing prescriptions on a special pad. Save all sorts of free notepads, calendars, or other materials for your child’s pretend play. Your child will learn that writing has a purpose in every day life.



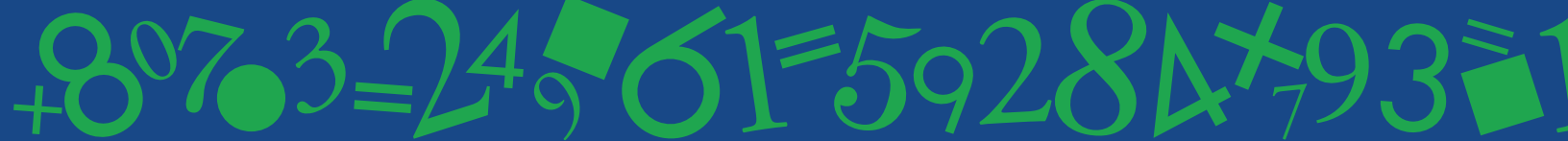
Mathematics & Numeracy

- Numeracy Relationships
- Classification and Comparison
- Pattern Recognition and Reproduction
- Geometric Shapes and Directional Words
- Measurement Relationships
- Problem Solving



“Children do much of their best learning when they are actively engaged in a problem, especially with the support of other people.”

Lev Vygotsky, Developmental Theorist



Numeracy Relationships

Children develop the ability to think and work with numbers easily, to understand their uses, and describe their relationships. Children learn the meaning of numbers in their everyday experiences (e.g. home, early childhood settings, community and nature).

It's in the Bag:

You will need five small zip lock bags, a permanent marker, and assortment of at least 10 small objects that will fit easily into the bags. (Poker chips, pompoms, large buttons, etc.)

- Use the marker to draw one star on the bag, two stars on the next bag, three on the next, four on the next, and five on the last bag.
- Spread the objects out on a table or the floor and tell your child to place the number of objects into each bag that matches the number of stars on the bag. After your child masters this game, you can extend this to include the numbers from 6 – 10.
- To increase your child's knowledge, write the number on the bags under the stars.

Remember to always supervise your child while doing activities that use small objects.

TIP

Have your child stand on your feet and count the steps as you walk and dance around your home together. Your child will feel, hear and see counting as you move together.





Classification & Comparison

Children apply mathematical skills through counting, sorting and comparing objects. Children describe their thinking and observations in everyday situations.

- Sorting involves separating objects into groups according to their similarities.
- Once your child is able to match more than one object, he or she is sorting!
- Help your child sort familiar objects into four groups using everyday items in your home such as stuffed animals, toy vehicles, kitchen items, and bathroom items.
- Put the items in a box or bag and help your child sort them into smaller boxes or bags according to the categories.
- Talk to your child about why he or she is putting the items in the various categories. The answers may surprise you!

TIP

Organizational skills such as sorting and classifying help your child to master complex learning skills throughout life. Sorting and classifying are early math skills that provide the foundation for later learning, especially learning patterns, algebra and data.





Pattern Recognition & Reproduction

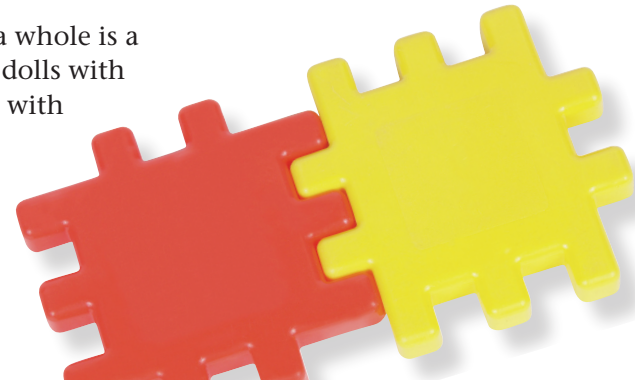
Children learn to identify and describe patterns using mathematical language. They develop the ability to reproduce patterns they see and to create new ones.

Math Words:

You can help your child learn math by helping him or her to talk about experiences and reflect upon them, and by helping your child to connect new ideas to his or her previous knowledge. Your child is probably already using a lot of math words like the following:

same	different	far	more	less	together	last	count
empty	sides	near	thick	narrow	short	tall	hard
roll	stack	flat	heavy	next	big	small	under

Playing with toys that are made up of parts that can be combined into a whole is a good way to help children understand shapes and space. These include dolls with clothes, models that come apart, blocks, Legos, puzzles, and paper dolls with clothes. Folding and cutting activities, such as making a snowflake, are helpful. Other suggested toys include nesting cups or boxes, cups of pitchers for sand and water play, and games that use a grid system (such as tic-tac-toe).



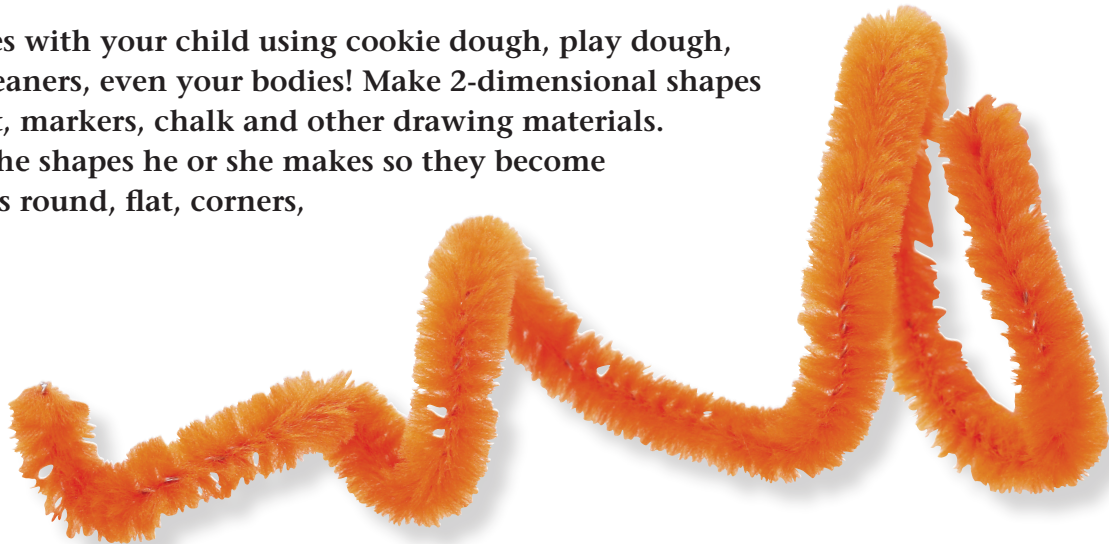


Geometric Shapes & Directional Words

Children build the foundation for recognizing and describing shapes by manipulating, playing with, tracing, and making common shapes using real objects in a variety of activities. Children learn spatial reasoning and directional words as they become more aware of their bodies and personal space with their physical environment.

Shapes Everywhere:

- Make 3-dimensional shapes with your child using cookie dough, play dough, sponges, wet sand, pipe cleaners, even your bodies! Make 2-dimensional shapes using crayons, finger paint, markers, chalk and other drawing materials.
- Have your child describe the shapes he or she makes so they become familiar with terms such as round, flat, corners, curved, sides and cone.





Measurement Relationships

Children begin to use measuring instruments to explore and discover measurement relationships. They apply the characteristics of length, quantity, volume, distance, weight, area, and time to real life situations in order to construct concepts of measurement.

Measure Up:

- Help your child to measure each ingredient into a big bowl. Mix with a spoon. Give each person a small cup or dish of the trail mix. Enjoy!

Trail Mix:

Ingredients -

1 cup dry cereal
1/2 cup raisins
3/4 cup mini-pretzels
1/4 cup chocolate chips

What to use -

Measuring cups
A big bowl
A spoon
A small cup or dish for each person



TIP

Experiment with other kinds of cereals, dried fruits, or snacks.



Problem Solving

Children build a foundation for solving problems by formulating questions and possible solutions individually and with others based on their observations and experiences.

One Potato, Two Potato:

- Put one raw potato in a small paper bag, two potatoes in another bag, and three potatoes in a third bag.
- Fold the tops of the bags down so you can't see the potatoes.
- Have your child pick up each bag and decide which one is heaviest and which is lightest.
- Open the bags and let your child count the potatoes.

Next, try this related activity. Without your child watching, put a potato in small paper bag, two carrots in another bag, and three mushrooms in a third bag. Have your child pick up each bag and put them in order from lightest to heaviest. As she or he opens the bags, point out that the number of objects does not always determine which is heaviest.



Physical Development & Health

- **Gross/Fine Motor and Sensory Development**
- **Movement Concepts**
- **Enjoyment of Motor and Sensory Experiences**
- **Personal Health and Safety Practices**
- **Respect for Differences**

“The solution to adult problems tomorrow depends in large measure upon how our children grow up today.”

Margaret Mead (1901 – 1978)
American Anthropologist



Gross/Fine Motor & Sensory Development

Young children observe, practice, demonstrate, and compare fundamental movements while learning to control their bodies in relation to other individuals and independent objects in their environment.

Fine Motor skills are small movements, (*such as grabbing something with your thumb and forefinger*), that use the small muscles of the fingers, toes, wrists, lips, and tongue.

Gross Motor skills are the bigger movements, (*such as running and jumping*), that use the large muscles in the arms, legs, torso, and feet.

Popcorn in the Butter:

Cut holes in the lids of five margarine tubs. Put one to five self-stick dots on each lid. Have your child use tweezers to pick up kernels of popcorn and put the appropriate number of kernels into each tub.

Always watch children closely when doing activities using small objects .

Walk the Line:

Have your child practice walking in line, one foot behind the other. First use a wide length of wood or cardboard placed on the ground or floor. Gradually introduce more narrow objects as your child's ability increases until your child is able to walk toe-to-heel following a jump rope laid down or a strip of masking tape.

Movement Concepts

Young children begin to develop movement and sensory vocabulary and use it accurately. Young children apply movement concepts to motor skills by responding appropriately to:

- direction (front/back, side/side, left/right)
- personal and general space
- effort and force (hard/soft)
- speed and flow (fast/slow)
- sensory experiences (rough/smooth, hot/cold)

Create an obstacle course in your living room or outdoors if weather permits. Set up a table or chair for your child to crawl under or go around, pile sofa cushions or pillows for your child to climb on, etc. Give your child verbal directions to move slowly through the course and then faster. Talk to your child about the obstacle course using words that describe the items. For example: *"The sofa cushions are soft,"* or *"The carpet is rough,"* or *"The grass is cool."*





Enjoyment of Motor & Sensory Experiences

Young children seek out and participate in challenging physical activities, including sensory experiences that support their growth in self-expression and social interactions with others.

Red Rover:

- Have your child stand on one side of the room or yard.
- Call to him or her from the other side and say: *“Red Rover, Red Rover, Jenny, (substitute your child’s name) run over!”*

Have your child follow your direction and run across the play area. Laugh and have fun with your child as you change the direction each time.

Try some of these ideas:

Jump over

Crawl over

Twirl over

Walk over

Roll over

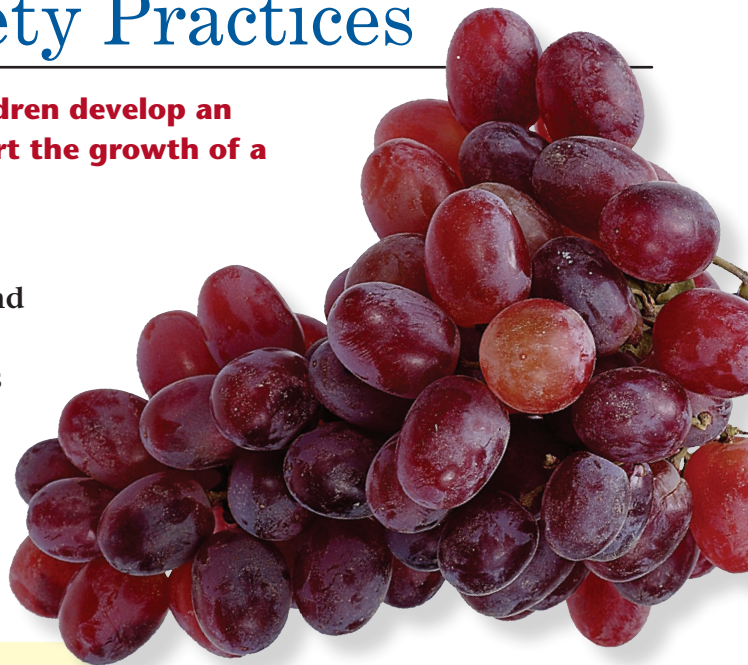
March over

Personal Health & Safety Practices

While participating in physical activities, young children develop an awareness of health and safety practices that support the growth of a healthy lifestyle.

Food Sort:

- Provide magazines that have colored grocery store and restaurant advertisements.
- With your child, cut out pictures of all types of foods while talking about healthy food choices and food choices that aren't so healthy.
- Put the pictures in a pile when finished cutting and help your child sort the healthy foods from the not so healthy foods.



TIP

Invite your child to use the pictures to create a favorite meal or one they would like to try.

Respect for Differences

Young children begin to demonstrate an understanding and respect for differences among people during physical activities.

Talk with your child about the differences they notice in others. Some people are able to jump more easily, while some run more easily. Introduce your child to concepts of similarities and differences; colors of eyes, ethnic differences, sizes, differing physical abilities. Be a model of acceptance.

Attend various cultural events in your community, such as Pow Wows, Saint Patrick's Day events, Chinese New Year, etc.

TIP

Play music from different cultures your home and dance and sing with your child to the music. Enjoy the differences.



Science

- **Formulation of Questions**
- **Prediction**
- **Experimentation**
- **Observation and Recording**
- **Formation of Conclusions**
- **Communications of Results**

“Our world is a museum, a field trip, a laboratory, and a natural resource, just waiting to be discovered, explored and enjoyed.”

Barbara Taylor, 1991



Formulation of Questions

Children will learn to ask questions about the world around them based on observations, experiences and interests. It's the first step in the scientific method.

Help your child to understand and use the six basic questions:

- Who?
- What?
- Where?
- When?
- Why?
- How?



Outdoor Exploration

Materials:

Two paper towel tubes cut in half

Masking tape or duct tape

Magnifying glass (optional)

Flashlight

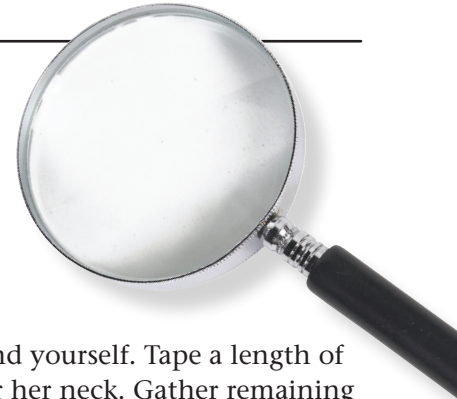
Piece of heavy string about 9 ft. long

Notebook

Pen or pencil

Bag

Empty egg carton



Tape the two halves of paper towel tubes together to create binoculars for your child and yourself. Tape a length of yarn or string to each side of the binoculars so your child can hang them around his or her neck. Gather remaining items, let your child explore them and pack them into the bag or a backpack. On a nature walk, choose an area on the ground to examine and put the string around the area. Tell your child to look closely at the area through their binoculars and tell you about what he or she sees. Write everything they tell you down in the notebook. Encourage your child to explore more closely with the flashlight and magnifying glass. Explain to your child that a scientist writes down what they see. Move the string circle to another area and continue exploring so that your child can make comparisons; sunny, shady, different kinds of plants, bugs, holes, rocks, etc. Let your child collect seeds, flowers, leaves, rocks, etc. to bring inside for a nature collection; the egg carton can be used to sort the collection. Ask your child questions like, "Where do you think the leaves came from?" and, "What do you think made the hole?" and, "What kind of animal do you think made that print?" These types of questions allow the child to think about and connect their observations with the world.



Prediction

Children will learn to predict answers and form hypotheses – the second step in the scientific method.

Water, Water, Water– Play:

Sink or Float? Ask your child to collect a variety of objects: pennies, cork, small plastic farm animals, pinecones, crayons, etc. Partially fill a small tub with water. Have your child put a few items into the tub and watch what happens. Let your child use a small cup to pour water on the items and tell you what happens. Let your child choose an item and ask you if you think it will sink or float. When your child seems to understand the concept of “sink” and “float,” have him or her predict whether an item will sink or float. Let your child test his or her predictions.

Create a chart that has the headings SINK and FLOAT. You can record your child’s predictions under each heading by writing down the name of the object and letting them check off whether they think the item will float or sink.

TIP

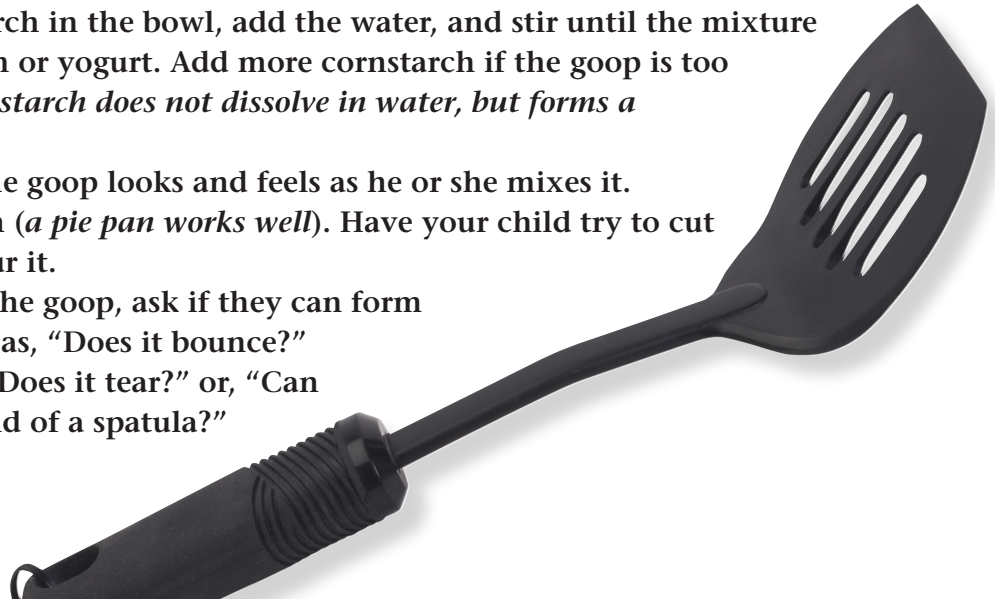
Your child’s literacy is enhanced when they see you write words on the chart. The scientific methods of learning are used as your child forms questions and answers about the world around them.

Experimentation

Children will learn to conduct experiments in order to test their predictions – the third step in the scientific method.

Kitchen Chemistry:

- Make cornstarch goop with your child (*recipe follows*).
- Let your child dump the cornstarch in the bowl, add the water, and stir until the mixture has the consistency of sour cream or yogurt. Add more cornstarch if the goop is too runny, or water if too thick (*cornstarch does not dissolve in water, but forms a suspension that does not settle*).
- Ask your child to tell you how the goop looks and feels as he or she mixes it.
- Pour the goop into a shallow pan (*a pie pan works well*). Have your child try to cut the goop with scissors as you pour it.
- As your child experiments with the goop, ask if they can form it into a ball. Ask questions such as, “Does it bounce?” or, “Does it keep its shape?” or, “Does it tear?” or, “Can you write letters in it with the end of a spatula?”





Goop Recipe

Cornstarch Goop:

Ingredients -

1-cup cornstarch

1 measuring cup for water

What to use -

unbreakable bowl

mixing spoon or spatula

Directions:

Pour the cornstarch into the bowl

Add water and stir until the mixture has the consistency of yogurt or heavy cream

If necessary, add more cornstarch or more water

Pour the goop onto a tray or cookie sheet

Try rolling it, cutting it, and finger painting with it.

TIP

Goop can be kept in a sealable plastic bag for a few days, but will get moldy after a short time. It should be thrown in the garbage if mold starts to form.





Observation & Recording

Children will learn to observe and record findings – the fourth step in the scientific method.

Melting Away:

- On a warm day, place 1 ice cube on each of 4 plastic plates or plastic container lids.
- Put a drop or two of food coloring on each ice cube, (*this will help your child more easily observe the melting ice*).
- Take outside and place two ice cubes in direct sun and two in a well-shaded spot.
- Sprinkle one ice cube in the sun and one ice cube in the shade with a small amount of salt.
- Watch the melting ice with your child and talk about which is melting faster, why are they melting at different rates, are the cubes without salt melting faster than those with salt, does the food color affect the rate of melting?

Science is a way of looking at things. It is a way of organizing knowledge and reorganizing again when the evidence demands it."

Michael Glaser, Author

Formulation of Conclusions

Children will learn to form conclusions – the fifth step in the scientific method.

Take your child on a treasure hunt walk. Bring a bag to collect found items that are of interest to your child. Help your child to notice every day items such as rocks, leaves and pinecones. Explore the items with your child that he or she has collected and talk about what they like about their treasures. What makes the items different? Are there any things that make some items alike? Which are bigger and which are heavier? Are the biggest objects always the heaviest. Use a small magnifying glass to help your child take a closer look. Encourage your child to tell you about their treasures.

TIP

Be very careful about items you allow your child to pick up and be sure to wash hands well when you get home!





Communication of Results

Children will learn to communicate final results – the sixth step in the scientific method.

Young children can observe and understand basic science concepts about air, water, plants, light and physical forces. Encourage your child to tell you about what is happening, help your child to record their results with pictures and words. This is an outdoor activity that will help teach your child about evaporation and will strengthen the muscles in their fingers and hands.

Water Painting:

- Give your child a large paint brush or roller and a small bucket of water.
- Let your child paint whatever they like outdoors.
- Help your child to notice how the colors brighten or shine when wet, and how they become more dull as they dry.
- If it is sunny, ask your child to paint something that is in the sun and something that is in the shade. Ask: “Which one dries faster?” or, “Do different materials dry faster than others?” Try letting your child “spray paint” with a squirt bottle filled with water.

TIP

Bubbleology: Let your child use a straw to blow bubbles into a bowl of water. Ask: “Where do you think the bubbles come from? What are they made of?”

Social-Emotional Development

- **Sense of Self**
- **Self-Regulation**
- **A Caring Community**
- **A Pro-Social Environment**

“A loving heart is the beginning of all knowledge.”

Thomas Carlyle (1795 – 1881)
Scottish Writer



Sense of Self

Children begin to identify who they are as a person (such as likes, dislikes, interests, strengths) and develop competence and confidence in their own unique abilities. They grow into themselves, differentiating themselves from parents and others, developing and beginning to recognize their areas of strength and skill, and applying their emerging esteem alone and in groups.

Talk to your child about the things they like to do with their family and friends. What do they like to do and play? What don't they like? What is their favorite story, their favorite color, and favorite foods? What do they do best? What would they like to try to do?

Help your child to think of all the ways they are like family members and friends and all the ways they are different. Have paper and crayons available and encourage your child to draw some of his or her favorite things. Children can tell you a story about themselves and you can write it down for them. Join the pictures and story together for a special book about your child.

“Like snowflakes, the human pattern is never cast twice.”

Alice Childress (1910 – 1994)

American Writer

A Caring Community

Children learn to feel secure as they develop relationships of trust with adults and other children in their expanding world beyond the family. They begin to recognize social cues and become sensitive to others' feelings.

Take turns making a face in the mirror that shows a feeling. One player can choose a feeling, and say, "Make a _____ face," (happy, sad, surprised, shy, and so forth). The other player makes the face and everyone applauds. It is then the next player's turn to tell the first what kind of face to make.





Self-Regulation

Children learn to identify and express their feelings in non-hurtful ways, recognize the impact their behavior has on others, and practice self-control.

Respond to your child's feelings. Label and discuss them to help your child to organize and understand those feelings. You can help your child learn self-control in these ways:

- Set appropriate boundaries for your child's behavior.
- Arrange a safe environment for your child to learn and practice new behaviors.
- Teach coping skills (*take a deep breath, hold a blanket to self-soothe, use words instead of fists*).
- Provide the needed support for skills not yet learned.
- Help your child anticipate the consequences of his or her actions.
- Model self-control in actions and words.
- Gradually allow your child to learn to regulate his or her display of emotion.
- Coach your child in strategies to deal with emotions that fit the particular situation.
- Teach games that encourage impulse control (*Red Light – Green Light, Red Rover, Mother May I*).

“Children are apt to live up to what you believe of them.”

Lady Bird Johnson

Former First Lady of the United States



A Pro-Social Environment

Children follow routines with increasing independence and handle variations without discomfort. They make their preferences known in increasingly mature ways and respond to adult guidance appropriately. Children begin to make friends and build relationships with both peers and adults.

If your child appears stressed or agitated with the daily routines, consider changing the schedule if at all possible and give your child cues when it is time to move to the next activity.

Make meals and snack times happy, talking times. Help your child talk about what they are eating, the play they have just done, or things that are still to come. Try to sit with your child as they eat. Show them how pleased you are when they talk to you or each other.

Eating time may take a little longer with all this talk. If your child is finished and does not want to wait for others, have a quiet activity ready for your child to go to. Provide your child with opportunities to make choices. For example, “Do you want juice or milk with your sandwich?”

“We shall never know all the good that a simple smile can do.”

Mother Teresa (1910 – 1997)
Roman Catholic Missionary

Social Studies

- **Awareness of Time**
- **Roles, Rights, and Responsibilities**
- **Places, Regions, and Spatial Awareness**
- **The Physical World**
- **Recognition of Diversity**
- **Community Awareness**

If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement, and mystery of the world we live in.”

Rachel Carson (1907 – 1964)
American Writer, Environmentalist

Awareness of Time

Young children begin to understand the concept of time, including past, present and future. They are able to recognize recurring experiences that are part of the daily routine.

- Make a picture board with your child of a typical day.
- Take pictures of your child or find pictures in magazines or catalogs that portray daily routines such as brushing teeth, eating breakfast, leaving for preschool, etc.
- Glue the pictures to cardboard rectangles (*these may be covered with clear contact paper to wear longer*).
- Help your child to arrange the pictures in the order they happen during your child's typical day.
- Talk about what they are doing in the picture and ask your child what happens next.



Roles, Rights & Responsibilities

Young children begin to follow rules and set personal boundaries for their behavior, as well as understand why rules are created. When presented with a set of alternatives, children are able to make choices for their own lives.

Let's Clean Up:

Help children with clean-up by talking about each thing they need to do. Ask questions to help your child think through their work.

- "The blocks need to be put away Dominic."
- "Now what goes in this basket? That's right, the little cars."
- "Do you know where these little animals go?"
- "Yes. Please find the rest and put them in the box."
- "Now what do we need to put away?"



Places, Regions & Spatial Awareness

Through exploration, young children learn that every place has its own unique characteristics. As they become aware of their bodies in space, they develop an understanding of how they are affected by and the effect they have upon the world around them.

When your child runs, climbs, swings, slides, plays with blocks, and puts puzzles together he is developing spatial sense. Use words to describe positions, (*for example: on, under, over, off, top, bottom, through, beside*) of both your child, and of the objects he or she sees. This will help him or her understand their meanings.

- Play a game of “Simon Says” with your child. Give your child instructions that involve positional words, such as, “put your hands on your hips, over your head, under your chin.”
- Set up an obstacle course in which your child will crawl under a table, over a cushion, through a box, around a chair, etc.

TIP

These activities will help your child develop spatial sense.





The Physical World

As young children explore the environment, they become aware of how people and the earth interact. By 4 and 5 years of age, children begin to understand how people use natural resources and change the earth for their own benefit. They develop an awareness of how to care for their physical environment and why it is important.

Explore your neighborhood, property, or a nearby park with your child. Talk to your child about the different trees, shrubs and plants you are seeing. Collect pieces of bark, leaves, or stems from different trees or plants. Use these with large sheets of paper and crayons to make rubbings. Talk to your child about how the trees, shrubs and plants provide shelter and food for different animals. Sort the leaves or stems into two categories like big and small and then see if your child can sort them into four sub-categories, like big and green – small and brown.

*“Knowledge – like the sky – is never private property ...
teaching is the art of sharing.”*

Abraham Joshua Heschel (1907 – 1972)
Polish Theologian, Educator



Recognition of Diversity

Young children begin to notice and react to similarities and differences (such as appearance, gender, and behavior) between themselves and others. With appropriate guidance, they are able to experience empathy for other people.

Mirror, Mirror:

- Give your child a hand mirror to look at themselves. Help them notice their own features such as hair color, eye color, color or shade of skin, freckles, etc. Help your child make a paper plate self-portrait using a variety of materials such as yarn, crayons, glue, colored paper, etc. Remind them to look at themselves in the mirror to see what features they want to include.
- Helping your child to closely observe themselves may lead to observations that other people have features that are different from their own.

TIP

When your child notices people in the community that are different from their normal experiences, they will probably be curious about what they are seeing. Make sure that you answer their questions honestly and with respect.



Community Awareness

Young children begin to understand the basic principles of community function, including work roles and the importance of money for purchasing. They see how their family interacts with the community to receive needed goods and services.

Neighborhood Walk:

Explore your neighborhood with your child. Talk about what kind of work needs to be done to take care of the streets and sidewalks. Do you know your neighbors? What kind of work do they do? How does that work affect the rest of your community? When you are back home, help your child draw a map of your neighborhood, naming and locating the people and landmarks they remember.

Montana Life:

Do you live on a ranch or farm? How do you and your family interact with the community? Do the animals you raise provide food for others? What do you need to buy to feed your animals? Where do you get these things? What is different about your home and those of the nearest town?

Grocery Store Match:

Cut the labels from items your family commonly uses such as soups, cereal, milk, eggs, etc. With your child use the labels to help make a grocery list. Take the list and the labels with you the next time you visit the grocery store. Ask your child to help you find the items you need by matching the labels to the items on your list.

Helpful Resources

- **Child Care/Preschool Checklist**
- **Emergency & Disaster Preparedness**
- **Recipes**
- **Books to Share with Your Child**



Child Care/Preschool Checklist

When searching for a compatible caregiver for your child, leave no stone unturned. Refer to this checklist when visiting child care centers and interviewing other child care providers to help you ask all the right questions about all the critical issues.

Caregiver/Teacher:

- Treats children with respect
- Gets on the child's level physically when speaking to him or her
- Speaks and listens with respect
- Accepts children's feelings
- Encourages growth and independence
- Provides every child with their own place for sleeping and storing belongings

Safety:

- Keeps all equipment in good condition
- Removes potential hazards from reach: cleaning supplies, sharp objects, medications, etc.
- Provides a clean and comfortable environment
- Practices good hygiene – hand washing, wiping noses, etc.



Child Care/Preschool Checklist

Appropriateness:

- Provides age appropriate equipment & activities
- Uses appropriate discipline
- Helps children learn how to interact with each other
- Helps children learn how to take care of themselves

Background:

- Provides references
- Provides written policies
- Has experience with children
- Has supervision as well as education and training
- Understands and respects different parenting styles



Emergency & Disaster Preparedness

Key Questions:

- Does the child care program have an emergency plan if a child is injured, sick or lost?
- Does the child care program have a plan in case of a disaster like a fire, earthquake, blizzard, flood, or tornado?
- Are emergency plans shared with parents during enrollment interviews and conferences?
- Does the child care program practice evacuation drills every month?
- Does the child care program have fully stocked first aid kits?
- Are emergency contact numbers (*including facility name, address and phone number*) clearly posted by every phone?
- Does the child care program have current information about who to contact in an emergency?
- Do caregivers carry children's emergency contact information with them on field trips?
- Are current staff's training certificates (*first aid and CPR*) posted upon request?

TIP

Make sure your caregiver has up-to-date contact information including your home, work and cell numbers.

Recipes

Uncooked Playdough

3 C flour	1 C salt
3 T salad oil	1 C water
Food coloring	

Mix ingredients and knead.

Cooked Playdough

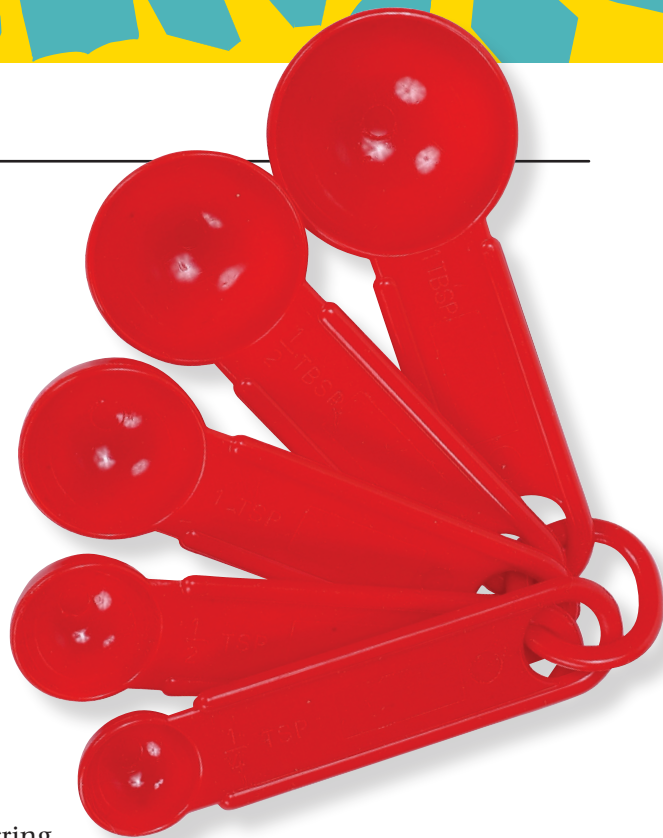
3 C flour	3 C water
3 T oil	3 T alum
1 1/2 C salt	

Mix dry ingredients. Add oil and water. Cook over medium heat, stirring constantly until thick. Remove from heat. Cool and store in sealable plastic bag or container.

Cooked Playdough 2

3 C flour	1 1/2 C salt
3 C water	3 T vegetable oil
2 T Cream of tartar	

Mix dry ingredients. Add water and oil. Cook over medium heat, stirring constantly until thick. Cool and store in sealable plastic bag or container.





Recipes

Fingerpaint

<i>2/3 C corn starch</i>	<i>1 C cold water</i>
<i>3 C boiling water</i>	<i>1 T glycerin</i>
<i>1 C Ivory powder</i>	<i>Food Coloring</i>
<i>detergent</i>	

Dissolve cornstarch in cold water. Smooth lumps and add to boiling water. Stir constantly. Boil until clear (*not more than 1 minute*). Add other ingredients. Use on waxed side of freezer paper or a washable surface for moorings.

Homemade Paste

<i>1/2 C flour</i>	<i>1/2 C sugar</i>
<i>2 C water</i>	

Mix flour and sugar. Add water and stir. Cook until thick. Place in non-breakable container. Store in refrigerator because paste sours in one to two days at room temperature.

Homemade Paste 2

<i>1/2 C flour</i>	<i>1 C water</i>
<i>oil of wintergreen (few drops)</i>	

Mix flour and water slowly. Boil over low heat (about 5 minutes) until thick and glossy. Cool. Add wintergreen. Store in closed non-breakable container in refrigerator.

Recipes

Goop

2 boxes corn starch

3 C water

Food coloring to tint

Mix cornstarch and water in a large tub or on trays. More cornstarch or water can be added if needed. Children use fingers and hands to explore.

Sidewalk Chalk

4 to 6oz paper cups

1/2 C Plaster of Paris

1/4 C water

1 tsp liquid or powder tempera paint or food coloring

1 plastic spoon

Measuring cup and measuring spoon

Measure Plaster of Paris and place in paper cup. Add paint or food coloring. Add water and stir (*should be consistency of thick paste*). Set aside and let harden (*approximately 20 minutes*). After it has hardened, peel off the cup. Use on sidewalk.



Recipes

Rainbow Stew

1/3 C sugar

1 C corn starch

4 C water

Red ,blue, and yellow food color

Mix ingredients. Cook until thick. Divide into 3 bowls. Add red, blue, and yellow coloring. Then let each child pick which colors he or she would like to use in his or her bag. Tape Ziploc bag after adding about 2 Tablespoons of color(s) chosen. Press air out of bag before taping. Let child push, pull, and squeeze. Discuss new colors being made.

Putty

1 c water,+ 2 T

1 C white glue

Food coloring

1 tsp. powdered Borax

Mix 1 C water and glue together, color if desired. Set aside. Dissolve Borax powder and 2 T hot water. Add Borax mixture by stirring it into the glue mixture. Pull out gooey mixture. Knead. Repeat pulling out step. May need to add more glue or Borax depending on consistency of putty. Store in covered plastic container and refrigerate.





Books to Share with Your Child

I AM AN ARTIST
by Mary Murphy
Houghton Mifflin Co. 2000

MOUSE PAINT
by Ellen Stoll Walsh
Harcourt Brace & Co. 1995

VINCENT VAN GOGH:
SUNFLOWERS AND SWIRLY STARS
by Joan Holub
Grosset & Dunlop, 2001

THE DINOSAUR WHO LIVED
IN MY BACKYARD
by B.G. Hennessy
Puffin Books, 1990

I TOOK MY FROG
TO THE LIBRARY
by Eric A. Kimmel
Puffin Books, 1997

BROWN ANGELS
by Walter Dean Myers
HarperCollins, 1993

BLUEBERRIES FOR SALE
by Robert McClaskey
Puffin Books. 1976
Smith (illustrator)

ADVENTURES of TAXI DOG
by Debra & Sal Barracca
Dial Books, 1990

BOB AND SHIRLEY: A
TALE of TWO LOBSTERS
by Harriet Ziefert, Mavis

FERNANDO'S GIFT/EL
REGALO de FERNANDO
by Douglas Keister
Little, Brown & Co., 1992

MY KINDERGARTEN
by Rosemary Wells
Hyperion Books for Children, 2004

NO JUMPING ON THE BED
by Ted Arnold
Dial Books, 1987



Books to Share with Your Child

A POCKET FOR CORDUROY

by Don Freeman

Puffin Books, 1980

YOU'RE JUST WHAT I NEED

by Ruth Krauss, Julie Noonan
(illustrator)

HarperCollins, 1998

GRANDMOTHER'S NURSERY

RHYMES: Lullabies, Tongue
Twisters, and Riddles from
South America/ Las Nanas de
Abuelita: Canciones de Cuna,
Trabalenguas Y Advinanzas de Su
damerica. Compiled by Nelly
Palacio Jaramillo, Elivia (illustrator)
Henny Holt, 1999

THE NAPPING HOUSE

by Audrey Wood

Red Wagon Books, 2000

MISS NELSON IS MISSING!

by Harry Allard, James Marshall
(illustrator)

Houghton Mifflin, 1977

MUFARO'S BEAUTIFUL

DAUGHTERS: AN AFRICAN TALE

by John Steptoe

HarperCollins, 1987

THE OLD MAN AND HIS DOOR

by Gary Soto

Putnam, 1998

OWEN

by Kevin Henkes

Greenwillow, 1993

THE QUILT STORY

By Tony Johnson & Tomie dePaola

PaperStar Books, 1996



Books to Share with Your Child

WEMBERLY WORRIED
by Kevin Henkes
Greenwillow, 2000

WHERE THE WILD THINGS ARE
by Maurice Sendak
Rayo, 1996

WHERE ARE YOU GOING?
by Eric Carle
Orchard Books an Imprint of Scholastic, Inc.,
2001

LITTLE GRUNT AND
THE BIG EGG
by Tomie dePaola
Holiday House
Weekly Reader Books,
1990

DREAM CATCHER
by Audrey Osogsky,
Ed Young, (illustrator)
Orchard Books, 1992

LITTLE FIREFLY – AN ALGONQUIAN
LEGEND
written & adapted by Terri Cohlene,
Charles Reasoner, (illustrator)
Terri Cohlene, Charles Reasoner
Watermill Press, 1990

*“Education is our passport to the future, for tomorrow
belongs to the people who prepare for it today.”*

Malcolm X (1925 – 1965)
American Civil Rights Activist

The Montana Department of Public Health and Human Services attempts to provide reasonable accommodations for any known disability that may interfere with a person participating in any service, program or activity of the department. Alternative accessible formats of this document will be provided upon request. For more information, call (406) 444-6677 or TDD: 1 (800) 253-4091. 10,000 copies of this public document were published at an estimated cost of \$.43 per copy for a total cost of \$23,442.00 which includes \$23,442.00 for printing and \$.00 for distribution.